

efficiency loan funds are also in vogue. They, too, have grown recently through funding from the American Recovery and Reinvestment Act (ARRA) of 2009. The National Association of State Energy Officials (NASEO) tracks 66 such funds that are available in 34 states. The total amount of funding dedicated to state energy revolving loan funds covered in their database is over \$925 million.⁷

However, residential energy efficiency is predominantly funded by the rate payer. Total spending on U.S. rate-payer-funded energy efficiency initiatives more than doubled in the latter half of the past decade—from \$2 billion in 2006 to \$4.8 billion in 2010. However, two-thirds of the total was concentrated in only 10 states, with California, New York, New Jersey, Massachusetts, and Washington as leaders (Barbose, Goldman, Hoffman, and Billingsley 2013; Barbose, Goldman, and Schlegel 2009). One such initiative, “on-bill financing” (OBF) is provided by the utilities as part of their efficiency efforts. Utilities provide zero- (or near-zero) interest loans for qualified customers, which are then recouped through a line item in the utility bill. However, most of these programs are targeted primarily at non-residential customers rather than homeowners due to the complexity of collection and resistance on the part of utilities (Fuller 2009). In 2011, New York State authorized residential on-bill loans, which are currently being implemented by the New York State Energy Research Authority (NYSERDA) in cooperation with New York utilities (Henderson 2012).

Property Assessed Clean Energy (PACE) bonds are a financing mechanism that uses locally issued tax bonds to fund residential energy improvement activities. The funds are paid back gradually (over 20 years or so) through special taxation placed on the property through a lien. In the event of resale, new property owners take on the responsibility of special taxes. Because of the first lien placed on the property, secondary market institutions have been reluctant to embrace mechanisms such as PACE bonds, thus limiting their widespread adoption to date.

⁷ <http://www.naseo.org/resources/selfs/> (Accessed February 7, 2013)